PRFFACE

Response rates for household travel surveys conducted within the United States have declined substantially over the past few decades. In recent years, household travel surveys conducted by a combination of telephone and mail have typically obtained rates in the range of 25 to 40 percent. However, some travel surveys have reported response rates as low as 5 percent. In many other parts of the world even the "typical" response rates for U.S. travel surveys would be considered low if not unacceptable.

Nonresponse is of major concern to transportation planners for three reasons. First, often there is a perception that data collected in a survey with low response rates are of a poor quality regardless of the sample's representativeness of the population. Second, for any given method of data collection, the costs of obtaining quality data increase as it becomes more difficult to secure the cooperation of sample members. Finally, if nonrespondents have different travel characteristics than the population as a whole, then data from the survey will be biased.

In response to those concerns, nonresponse was one of five major topics addressed at the 1995 Transportation Research Board (TRB) conference on household travel surveys. In workshops held at that conference, participants developed a research agenda and a set of research problem statements for each topic area. Several of the recommended research projects have since been funded under the Department of Transportation and Environmental Protection Agency's Travel Model Improvement Program (TMIP). This report is one example and is the first in a series of initiatives focusing on nonresponse in household travel surveys. The purpose of this report and the other projects is to improve the quality of survey data gathered by MPOs and state DOTs, and to promote efficient utilization of data collection resources. To accomplish these goals, this report used a three-pronged approach as described in the chapter summaries below.

Chapter 1. Measuring and reporting nonresponse: A standard approach to reporting response rates is recommended. A standard approach, used consistently, can help assess the quality of survey data. Standard reporting also allows users to evaluate different techniques for implementing surveys, thus building a coherent body of knowledge on methods for household travel surveys.

Chapter 2. Reducing nonresponse: To reduce nonresponse, characteristics of respondents and interviewers must be understood. Characteristics of typical nonrespondents to travel surveys are discussed. Procedures to improve response rates are recommended.

Chapter 3. Statistical methods for reducing the impact of nonresponse: Despite our best efforts, all travel surveys are likely to have nonrespondents. Specific methods to adjust survey results to better represent the population are recommended.

This project benefited from the advice and experience of many people outside of NORC and FHWA. We would especially like to thank the members of our advisory panel:

Ed Christopher, Chicago Area Transportation Survey
Bob Griffiths, Metropolitan Washington COG
Ryuichi Kitamura, Kyoto University
Arnim Meyburg, Cornell University
Paul Moore, Research Triangle Institute
Eric Pas, Duke University
Cheryl Stecher, Applied Management and Planning Group
Peter Stopher, Louisiana State University
Johanna Zmud, NuStats